# 3.2 RESOURCE USES

## 3.2.1 FOREST PRODUCTS

### Laws, Regulations, and Policies

The sale of forest products is authorized under and directed by the following laws, policy and guidance:

- Material Disposal Act of 1947-Public Law 80-291
- National Environmental Policy Act of 1969
- Federal Land Policy and Management Act of 1976
- Water Quality Act of 1987
- Clean Air Act
- Public Domain Forest Management Policy of 1989
- State of Montana Best Management ractices Law of July 1991
- Total Forest Management Initiative of June 1992
- BLM Handbook H-9231-1 (Forest Products Trespass Procedures)

### Affected Environment

#### *Commercial Forest Lands*

Under the 1979 Dillon MFP, the "annual harvest" was set at 4.4 million board feet on a little under 100,000 acres of productive forest land. As a result of lands identified for wilderness study in the early 1980's, the probable sale quantity was adjusted to about 1.6 million board feet on approximately 83,000 acres of available commercial forest land. If released from wilderness review, an estimated 40,300 acres of commercial forest lands would no longer be constrained by WSA policies. Land adjustments have reduced the acres of forested lands in the commercial forest land base to approximately 82,000 acres. None of the forested lands acquired as a result of land adjustments were placed in the commercial base acres.

Approximately 5,000 acres of forested lands in the planning area have been treated by forest management or burned from 1951 to 2001. Of this total, 55% were clearcut and 45% were partial cut acres. Based on an estimated available base acreage of 82,000 acres, almost 6% has been affected by either harvest activity or fire in the past 50 years. The majority of forest treatments were in sawlog size stands. The bulk of the clearcut acres were in lodgepole pine, with the majority of partial cut acres being in Douglas-fir habitats. Wildfire suppression has kept forest structure changes from wildfire to less than 1% of all disturbances.

#### *Local/Regional Demand for Forest Products*

Local or regional demand for sawlog products from the planning area has averaged a little over 1 million board feet/year. There has only been one year since 1980 when DFO timber sales that were offered did not sell. Local demand for post/poles has varied from several hundred to several thousand trees/year. Personal use firewood permits from BLM lands has been averaging about 50,000 board feet/year of dead wood. Approximately 30 individual small sale permits are issued annually for these forest products. Since 1995, Christmas tree permits have averaged about 20 per year.

Financial returns to the US Treasury from the BLM forestry program in Dillon between 1951 and 2001 were approximately $1,490,000. Total volume of timber harvested in that period was 57,500,000 board feet for an average of 1,150,000 board feet per year.

Regional demand is well over 200 million board feet from four major sawmills within 200 miles of Dillon. The working circle for these sawmills ranges from Canada to Utah, from eastern

Montana to the vicinity of Missoula and varies with the timber market.

### *Unauthorized Use*

BLM Timber Trespass Policy is contained in BLM H-9231-1 Forest Products Trespass Procedure Handbook. Over all, while timber trespass is noteworthy in the immediate area where it occurs, its cumulative effect in the planning area has been minor. Timber trespass actions have averaged from one to two per year over the past 20 years. The majority of these would be classified as small inadvertent trespass onto BLM lands when timber harvest activity occurred on adjacent lands. Usually, these have been settled at the local administrative level. There has been one criminal trespass processed in 20 years.

Prevention actions have consisted of cautioning adjacent land owners of BLM trespass policy when staff is informed of activity in the vicinity of BLM administered lands.

# 3.2.2 LANDS AND REALTY

## Laws, Regulation, and Policy

The lands and realty program operates in accordance with a myriad of laws and associated regulation and guidance. These include but are not limited to:

- Federal Land Policy and Management Act of 1976, as amended
- Mineral Leasing Act of 1920, as amended
- Federal-Aid Highway Act of 1958, as amended
- Alaska National Interest Lands Conservation Act of 1980
- The Recreation and Public Purposes Act of 1926, as amended
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1971
- Land and Water Conservation Fund Act of 1965, as amended
- Federal Land Transaction Facilitation Act of 2000
- The Declaration of Taking Act of 1931
- The Condemnation Act of 1888, as amended
- The Engle Act of 1958
- The Federal Power Act of 1920, as amended
- The Act of May 24, 1928, as amended
- Taylor Grazing Act, as amended
- The Desert Land Act of 1877, as amended
- The Carey Act of 1894, as amended
- General Allotment Act of 1887, as amended
- The Act of December 22, 1928, as amended
- Sections 2275 and 2276 of the Revised Statutes, as amended
- 43 CFR 2100 (Acquisitions)
- 43 CFR 2200 (Exchanges)
- 43 CFR 2300 (Withdrawals)
- 43 CFR 2400 (Land Classification)
- 43 CFR 2500 (Disposition: Occupancy and Use)
- 43 CFR 2600 (Disposition: Grants)
- 43 CFR 2700 (Disposition: Sales)
- 43 CFR 2800 (Use: Rights-of-Way)
- 43 CFR 2900 (Uses: Leases and Permits)
- 43 CFR 9230 (Trespass)

## Affected Environment

### *Land Use Authorizations*

Land use authorizations include right-of-way grants, road use agreements and associated temporary use permits under several different authorities; leases, permits, and easements under Sec. 302 of the Federal Land Policy and Management Act of 1976 (FLPMA); airport leases under the Act of May 24, 1928; and Recreation and Public Purposes (R&PP) Act leases.

The DFO administers approximately 355 rights-of-way which encumber over 8,000 acres of BLM lands (LR2000 Database Report, April 2002). These existing grants are for a myriad of different facilities and are held by private individuals and groups as well as various business and government entities. Power transmission and distribution lines, roads, and telephone lines are the most common types of right-of-way facilities – accounting for well over half of the total number of grants. Examples of additional types of right-of-way facilities authorized within the planning area include water pipelines, communication sites, ditches, railroads, material sites, and fiber optic lines. The DFO processes approximately 10 to 15 right-of-way actions annually. These include right-of-way applications for new facilities as well as the amendment, assignment, renewal or relinquishment of existing right-of-way grants.

Sixteen communication site rights-of-way occupying ten different communication site locations are authorized within the planning area (see **Map 4 and Table 20)**. Potential new users are encouraged to locate within existing communication facilities. While Maurer Mountain has a communication site plan completed in 1983, none of the other communication site facilities have plans. Site plans are expected to be completed or updated for the Bear Trap, Pipe Organ, Armstead Mountain and Maurer Mountain communication sites prior to the end of 2005.

**Table 20. Communication Sites and Locations**

| Communication Site | Legal Description (Principal Meridian, Montana) |
|---|---|
| Armstead Mountain | SE1/4NE1/4, Sec. 34, T. 10 S., R. 11 W. |
| Pipe Organ | SW1/4NE1/4, Sec. 4, T. 9 S., R. 10 W. |
| Maurer Mountain | NE1/4NW1/4, Sec. 29, T. 10 S., R. 9 W. |
| Bear Trap | SE1/4NE1/4, Sec. 18, T. 4 S., R. 1 E. |
| Baldy Ridge | NE1/4SE1/4, Sec. 26, T. 7 S., R. 3 W. |
| Badger Pass (aka: Bannack) | NE1/4NW1/4, Sec. 22, T. 7 S., R. 11 W. |
| Barton Gulch | SE1/4SW1/4, Sec. 12, T. 7 S., R. 4 W. |
| Lakeview Ridge | Lot 4 of Sec. 26 and Lot 1 of Sec. 27, T. 14 S., R. 2 W. |
| Monida Pass | NE1/4NE1/4 and NW1/4NE1/4, Sec. 25,T. 14 S., R. 7 W. |
| VC Hill | SW1/4NE1/4, W1/2, and NW1/4SE1/4,Sec. 32, T. 6 S., R. 2 W. |

The BLM has not formally designated any right-of-way corridors or use areas within the planning area, although attempts are made to group compatible facilities where possible. The DFO currently has no right-of-way exclusion or avoidance areas. In accordance with the 1979 Dillon MFP, when feasible, power distribution lines are required to be buried when located on public lands within ¼ mile on each side of the Madison River from Quake Lake to the northern planning area boundary to protect scenic values.

The DFO administers six Sec. 302 FLPMA temporary land use permits involving about 40 acres of BLM lands (LR2000 Database Report, April 2002). These permits are issued for a term of up to three years and are for the temporary use of public lands for agricultural use. There are no leases or easements under Sec. 302 of FLPMA or airport leases located in the planning area. Only one R&PP lease exists within the area administered by the DFO. This 90-acre lease is held by the Dillon Rifle and Pistol Club and expires in 2008. R&PP transfers are discussed below under *Land Ownership Adjustment.*

Currently, the DFO analyzes requests for land use authorizations and applies mitigation measures on a case-by-case basis.

## *Land Ownership Adjustment*

Land ownership (or land tenure) adjustment refers to those actions that result in the disposal of BLM lands and/or the acquisition of non-Federal lands or interests.

Current planning guidance with respect to land ownership is provided by the 1979 Dillon MFP as supplemented by State Director guidance issued in 1984 (USDI-BLM 1984a). This guidance was later amended by the 1989 State Director's guidance pertaining to access (see the "Access" section below). This direction establishes land exchange as the predominant method of land ownership adjustment. It also establishes retention, disposal, and acquisition criteria to be used in categorizing the public lands. Criteria in the supplement were used to identify retention zones within the planning area. There are currently approximately 814,741 acres (90%) of BLM lands located within retention zones in the planning area. These retention zones typically include the better blocked BLM lands that meet the retention criteria. Although lands in retention zones can be disposed of when significant public benefits are realized, the goal generally is to retain or enhance public land holdings within these zones. Lands outside these retention zones are generally available for the full range of land ownership adjustment opportunities – including retention, exchange, sale, or transfer. Land ownership adjustment proposals in the planning area are analyzed in project specific reviews using the aforementioned guidance.

Since the completion of the Dillon MFP in September of 1979, the primary means of land ownership adjustment within the planning area has been through exchange. Twenty-three exchanges affecting Federal and/or non-Federal lands within the planning area have been completed during this time period. The DFO has been using exchanges extensively to improve public land ownership patterns by generally disposing of small, isolated tracts of public land with limited resource values and acquiring non-Federal land with higher public resource values adjacent to larger blocks of public land. Lands in the planning area have also been used in exchanges mandated by Congress. During this same time period, the DFO has also completed one land purchase along the Beaverhead River about 12 miles southwest of Dillon and one public land sale approximately 17 miles north of Dillon.

The Recreation and Public Purposes (R & PP) Act authorizes the transfer of public lands in addition to leases when it serves the public interest. The DFO completed five R & PP transfers since the approval of the MFP. Three of the transfers have been to Montana FWP for additions to Bannack State Park, one has been to Madison County for a historic monument, and one to the Montana Heritage Commission also for historic monument purposes. During this same time period, no lands have been conveyed for agricultural entries under the Desert Land Act or Carey Act, nor have any lands been conveyed for airport grants, Indian allotments, color-of-title actions, railroad or state grants.

**Table 21** lists land ownership adjustment actions for the planning area since the completion of the Dillon MFP in September of 1979**.** Note that acreage figures are approximate.

**Table 21. Land Ownership Adjustment Actions Since 1979**

| Type of Action | Number of Actions | Acres Disposed | Acres Acquired |
|---|---|---|---|
| Public Sales | 1 | 20 | --- |
| Purchases | 1 | | 2,244 |
| R&PP Transfers | 5 | 1,270 | --- |
| Land Exchanges | 23 | 38,343 | 21,682 |
| | **Total Acres** | **39,633** | **23,926** |

## *Access*

Access, for the purposes of this section, refers to the physical ability and legal right of the public, agency personnel, and authorized users to reach public lands. The lands and realty program primarily assists in the acquisition of easements to provide for legal access where other programs have identified a need.

Access to public lands administered by the Dillon Field Office is an issue of concern to both agency personnel and the public. The planning area's existing fragmented ownership pattern of BLM lands, intermingled with private, state, and other Federal lands, complicates the access situation. While the DFO has and is currently making progress in terms of improving access to public lands, there are still areas within the planning area that lack legal access. Current planning guidance with respect to access is provided by the 1979 Dillon MFP as supplemented by guidance prepared by the Montana State Office on access (USDI-BLM 1989). In accordance with guidance in this latter document, the DFO has been focusing its access acquisition efforts on:

- larger blocks of public lands which are designated for retention in BLM ownership
- areas with important resource values
- areas where public demand for access is high
- areas with substantial BLM investments

Generally speaking, access is acquired from willing landowners on a case-by-case basis as the need or opportunity arises using criteria and direction provided in the guidance referred to above.

The Dillon Field Office uses the acquisition of road and trail easements as the primary means of obtaining legal access to public lands where it does not currently exist. The DFO administers a total of 106 easements, including 84 exclusive and 24 nonexclusive easements (LR2000 Database Report, April 2002). Most of these are road or trail easements, though some are for fence or pipeline placement across lands not administered by BLM. Since the completion of the Dillon MFP in 1979, the DFO has been acquiring access-related easements at the average rate of about three per year. When possible, emphasis for easement acquisition is on those roads or trails identified through a route analysis process.

Although used much less frequently than easement acquisition, the DFO uses land exchanges on occasion to acquire needed access to public lands. Access is typically just one of many benefits of these exchanges. The consolidation of BLM land ownership patterns by exchange has generally improved the access situation in the planning area. When disposing of BLM parcels containing roads or trails necessary for access to other public lands, the DFO protects these access routes by reserving them in the conveyance documents.

## *Withdrawals*

A withdrawal is a formal action that sets aside, withholds, or reserves Federal lands by administrative order or statute for public purposes. The effect of a withdrawal is to accomplish one or more of the following:

- Segregates (closes) Federal land to the operation of all or some of the public land laws and/or mineral laws
- Transfers total or partial jurisdiction of Federal land between Federal agencies
- Dedicates Federal land for a specific public purpose

Withdrawals can be categorized into three major types including:

- Congressional - legislative withdrawals made by Congress in the form of public laws. Examples include designation for wild and scenic rivers or wilderness
- Administrative – withdrawals made by the President, Secretary of Interior, or other officers of the executive branch of the Federal Government. Examples

include stock driveways and public water reserves

- Federal Power Act – power project withdrawals established under the Federal Power Act of June 10, 1920. These withdrawals are automatically created upon the filing of an application for hydroelectric power development with the Federal Energy Regulatory Commission (FERC)

**Table 22** summarizes the specific types of withdrawals and the acres of BLM lands withdrawn in each type of withdrawal. It should be noted that many of these withdrawals overlap so the total number of acres withdrawn is less than the sum of the acres shown in **Table 22. Map 5** shows the location and distribution of withdrawals across the planning area. The table and map do not include withdrawals of National Forest System lands (other than administrative sites outside forest boundaries), the Big Hole National Battlefield administered by the National Park Service, the U.S. Sheep Experiment Station administered by the Agricultural Research Service, or the Red Rock Lakes National Wildlife Refuge and associated Red Rock Lakes Wilderness administered by the U.S. Fish and Wildlife Service. These acreages are discussed in Chapter 1.

**Table 22. Existing Withdrawals in the Planning Area**

| Type of Withdrawal | BLM Acres Withdrawn |
|---|---|
| BLM Recreation Sites | 6,526 |
| Stock Driveways | 35,591 |
| Public Water Reserves | 1,991 |
| BLM Protective Withdrawal | 2,301 |
| Reservoir Site Reserve | 8,737 |
| USFS Administrative Sites | 591 |
| Bureau of Reclamation | 880 |
| Air Navigation Site | 10 |
| Power Site Reserves, Classifications, and FERC Power Projects | 12,008 |
| Lee Metcalf Wilderness – Bear Trap Unit | 6,162 |
| Total Acreage | 74,797 |

BLM Recreation Sites: These include several administrative withdrawals for the Deadwood Gulch, Shearing Pen, Red Mountain, Ennis Lake, Ruby Reservoir, Ruby Creek and South Madison recreation sites as well as the Bear Trap Canyon Recreation Area. All of these sites are withdrawn from surface disposal and mining, but not from mineral leasing. The Bear Trap Canyon Recreation Area is also withdrawn from mineral leasing.

Stock Driveways: These are administrative withdrawals for Stock Driveways 11 and 22. BLM lands within these withdrawals are withdrawn from surface disposal, but not from mining or mineral leasing.

Public Water Reserves: These include a number of administrative withdrawal actions over the years for spring areas set aside for public use. These areas are scattered throughout the planning area and are withdrawn from surface disposal and nonmetalliferous mining, but not from metalliferous mining and mineral leasing.

BLM Protective Withdrawal: This is a single administrative withdrawal on lands acquired for wetland, riparian, recreation, and wildlife values along the Beaverhead River about eleven miles south of Dillon. The property is withdrawn from surface disposal and mining, but not from mineral leasing. Another protective withdrawal proposed in the Axolotl Lakes area is currently being processed.

Reservoir Site Reserve: This consists of a single administrative withdrawal for Lima Reservoir located in the southern portion of the planning area near the Montana-Idaho border. The lands are withdrawn from surface disposal and nonmetalliferous mining, but not from metalliferous mining and mineral leasing.

USFS Administrative Sites: These are administrative withdrawals for U.S. Forest Service administrative sites located outside

Forest Service boundaries including the Wisdom, Jackson, Bloody Dick, and Madison River (Ennis Horse Pasture) sites. The Wisdom and Madison River (Ennis Horse Pasture) sites are withdrawn from surface disposal and mining, while the Jackson and Bloody Dick sites are withdrawn from surface disposal and nonmetalliferous mining. None of these sites is withdrawn from mineral leasing.

Bureau of Reclamation: There are two separate reclamation withdrawals for the Clark Canyon Project located at or in the general vicinity of Clark Canyon Reservoir southwest of Dillon. The lands are withdrawn from surface disposal and mining, but not from mineral leasing.

Air Navigation Site: This is a single administrative withdrawal for an air navigation site located about twelve miles southwest of Dillon. It's withdrawn from surface disposal and mining, but not from mineral leasing.

Power Site Reserves, Classifications, and FERC Power Projects: There are numerous powersite reserves and classifications within the planning area. These are administrative withdrawals that are located in three general areas including along portions of the Big Hole River about 15 miles north of Dillon, along the Red Rock River in the general vicinity of Lima Reservoir, and along the Madison River. Generally speaking, these sites are withdrawn from surface disposal only.

There are two main FERC Power Project withdrawals affecting BLM lands within the planning area. One withdrawal is for FERC Project No. 2188, a hydropower development on the Madison River about eleven miles northeast of Ennis. The second withdrawal is for FERC Project No. 9482, a hydropower project on Wisconsin Creek and Noble Fork about five miles northeast of Sheridan. These withdrawals are administered by FERC.

Lands included in an application for hydroelectric power development with FERC are automatically segregated from surface disposal. At the time FERC issues a license or preliminary permit, the lands are automatically closed to location and entry under the mining laws.

Lee Metcalf Wilderness – Bear Trap Unit: This is a Congressional withdrawal located along the Madison River and adjacent public lands between Ennis Lake on the south and the Warm Springs recreation site on the north. The lands are withdrawn from surface disposal, mining, and mineral leasing.

The Dillon Field Office considers requests for new withdrawals and withdrawal revocations, extensions, or modifications on a case-by-case basis. Existing withdrawals are also reviewed on a case-by-case basis prior to the end of the withdrawal period or as otherwise required by law to determine whether they should be extended, revoked, or modified.

It should be noted that while BLM land classifications are not formal withdrawals, they are considered "de facto" withdrawals since most land classifications also segregate public lands from the operation of all or some of the public land laws and/or mineral laws. A BLM land classification accomplishes one of the following:

- Determines if BLM lands are suitable for certain types of entry (disposal or lease) under the public land laws (e.g., Desert Land Act entries)
- Determines if BLM lands are suitable for retention for multiple use management

Historically, much of the planning area was under classification for retention for multiple use pursuant to the Classification and Multiple Use (C & MU) Act of 1964. With the passage of FLPMA in 1976 and its direction that BLM lands generally be retained in public ownership, these C & MU classifications within the planning area were deemed unnecessary and were terminated. The one exception is a five-acre C & MU classification that still remains for the retention of BLM lands encompassing a historical site known as Road Agent's Rock in Section 29, T. 7 S., R. 11 W., PMM. This site remains segregated from all forms of

appropriation under the public land laws, including the mining laws but not the mineral leasing laws.

Any new classification actions since the completion of the MFP in 1979 have been associated with Recreation and Public Purposes Act lease or sale actions.

### *Unauthorized Use*

Trespass under the Lands and Realty program can be split into three separate categories. These include:

- Unauthorized Use
- Unauthorized Occupancy, and
- Unauthorized Development

**Unauthorized Use** refers to activities that do not appreciably alter the physical character of the public land or vegetative resources. Some examples of unauthorized use include the abandonment of property or trash, enclosures, and use of existing roads and trails for purposes which require a use fee or right-of-way. **Unauthorized Occupancy** refers to activities which result in full or part-time human occupancy or use. An example would be the construction, placement, occupancy, or assertion of ownership of a facility or structure (cabin, house, natural shelter, trailer, etc.). **Unauthorized Development** means an activity that physically alters the character of the public lands or vegetative resources. Examples include cultivation of public lands and road or trail construction/realignment.

The DFO attempts to abate trespass through prevention, detection, and resolution. In the Lands and Realty program, priority for resolving trespass in the planning area is accorded to those newly discovered, ongoing uses, developments, or occupancies where resource damage is occurring and needs to be halted to prevent further environmental degradation. Lesser priority is accorded those historic trespass cases where little or no resource damage is occurring. Realty trespass cases in this latter category are resolved as time permits.

## 3.2.3 LIVESTOCK GRAZING

### Laws, Regulations, and Policies

The major legislation, mandates and guidance directing administration of livestock grazing on public land include:

- Taylor Grazing Act of 1934 (43 U.S.C. 315)
- Federal Land Policy and Management Act of 1976 (43U.S.C. 1701)
- The Public Rangeland Improvement Act of 1978, 43 U.S.C. 1901 et seq.
- Executive Order 12548, Livestock Grazing Fee
- 43 CFR 4100 (Grazing Regulations)

### Affected Environment

The Dillon Field Office manages the livestock grazing on public lands administered by the Bureau of Land Management in Beaverhead and Madison counties. The planning area encompasses approximately 5.8 million acres of which BLM manages approximately 900,000 acres. There are 425 allotments in the project area, which are utilized by 268 livestock operators. The total active permitted use of all permittees in the planning area is 113,219 animal unit months -AUM's (see glossary terms for AUM's, Active Preference, and Actual Use). The total AUM's authorized for the past ten years is shown on **Table 23**. Grazing licenses and permits are issued for a ten-year period and are reviewed through an evaluation process.

### *Allotment Categorization and Grazing Systems*

Three selective management categories were developed in 1981 to prioritize grazing allotments according to management needs. All allotments have been placed into these categories according to management needs, resource conflicts, potential for improvement,

and Bureau funding/staffing constraints. The allotments categorization was reviewed in 1990

**Table 23. Comparison of Actual Use to Permitted Use by AUM Between 1992 and 2001**

| Year | Authorized (Actual Use) | Preference (Maximum) |
|---|---|---|
| 1992 | 78,973 | 113,219 |
| 1993 | 76,704 | 113,219 |
| 1994 | 78,176 | 113,219 |
| 1995 | 80,227 | 113,219 |
| 1996 | 83,691 | 113,219 |
| 1997 | 82,829 | 113,219 |
| 1998 | 84,450 | 113,219 |
| 1999 | 81,558 | 113,219 |
| 2000 | 82,443 | 113,219 |
| 2001 | 80,328 | 113,219 |
| **Average** | **80,938** | **113,219** |

to ensure proper classification.

Improve (I) category allotments are managed to improve current unsatisfactory resource conditions and receive the highest priority for funding and management actions. Maintain (M) category allotments are managed to maintain current satisfactory resource conditions and are actively managed to ensure that resource values do not decline. Custodial (C) category allotments are managed custodially by the BLM to protect resource conditions and values. As watersheds are evaluated, the allotment category is reviewed. The DFO has 128 Improve (I) category allotments covering 542,213 acres, 88 Maintain (M) category allotments covering 206,284 acres, and 209 Custodial (C) category allotments covering 82,100 acres.

The Mountain Foothills Grazing EIS outlined proposed grazing systems for most I and M category allotments. As a result of this direction, grazing systems have been developed and implemented through agreements or decisions with allotees. These grazing systems are usually documented and described in an Allotment Management Plan (AMP). An AMP is a documented program, developed as an activity plan, that directs management of livestock grazing on specified public land in order to achieve objectives relating to desired resource conditions, sustained yield, and multiple use. AMP's are implemented when incorporated into the terms and conditions of the grazing permits or leases and accepted by the permittee or lessee. Strategic portions of AMP's are the rangeland projects identified to meet resource objectives and subsequent grazing systems/schedules. The planning area has 56 I category allotments, 46 M category allotments and 5 C category allotments with AMP'S that have been implemented. **Appendix D** provides allotment specific information, including acres, use dates, and AMP implementation or revision dates.

There are 40 allotments that cross administrative boundaries and are co-managed with the Forest Service. Some of these

allotments have interim riparian management guidelines that were applied based on the Beaverhead Forest Plan Riparian Amendment EIS until allotment plans are revised or completed.

## *Rangeland Monitoring and Evaluation*

The BLM conducts rangeland monitoring to determine whether the land use plan and AMP objectives are being met. Vegetation trend, livestock utilization and actual use, and climate are monitored. Monitoring data collection tracks progress in meeting identified management objectives. Active grazing use authorizations and management actions in each allotment are periodically evaluated, based on the monitoring data. If monitoring shows that progress is being made towards objectives, management will continue. However, if progress is not being made towards meeting objectives, then management adjustments will be made. Adjustments are made by agreement or decision in accordance with legislation, regulations, and policy so that public land resources are maintained or improved.

Direction since 2000 provides for allotments to be evaluated for rangeland health on a watershed basis at the fifth Hydrologic Unit Code (HUC) level. Following evaluation, management is prescribed to maintain or improve rangeland health. **Table 24** outlines the current watershed analysis schedule with acreages for the high priority watersheds.

## *Range Improvements*

The BLM and cooperators have completed structural and nonstructural projects on public lands to improve and manage these lands since 1943. The nonstructural projects include seedings, plowing, chiseling, contour furrowing, and herbicide spraying. The structural projects have included wells, pipelines, troughs, fences, guzzlers, reservoirs and cattle guards. A summary of existing range improvements of record is shown on **Table 25**. There are older projects that are not included in Table 25.

**Table 24. Acreage by Jurisdiction within High Priority Watershed Analysis Areas (in Priority Order)**

| Watershed Name | 5th HUC # | BLM | FS | ARS | FWS | STATE | PRIVATE |
|---|---|---|---|---|---|---|---|
| Horse Prairie | 1090 & 1100 | 50,767 | 102,370 | 0 | 0 | 18,918 | 65,058 |
| Big Sheep Creek | 1050 | 55,505 | 101,803 | 0 | 0 | 3,410 | 10,400 |
| Centennial Valley | 1010 & 1020 | 86,558 | 43,986 | 15,649 | 39,176 | 62,054 | 53,584 |
| Bannack | 1110 & 2020 | 91,541 | 28,134 | 0 | 0 | 16,670 | 50,322 |
| South Tobacco Roots | 3050 | 12,614 | 43,552 | 0 | 0 | 4,058 | 74,708 |
| | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ruby | 3030 & NE Corner of 3010 | 34,350 | 3,890 | 0 | 0 | 8,132 | 54,526 |
| Blacktail | 2050 | 56,354 | 26,691 | 0 | 0 | 52,767 | 12,5121 |
| Sage Creek | 1070 | 84,358 | 0 | 0 | 0 | 32,001 | 47,776 |
| Beaverhead | 2040 | 33,580 | 0 | 0 | 0 | 6,604 | 43,120 |
| Medicine Lodge | 1120 | 38,835 | 46,612 | 0 | 0 | 6,388 | 33,025 |

**Table 25. Summary of Types of Existing Rangeland Improvements**

| Improvement | Number |
|---|---|
| Cattle guards | 114 |
| Fences (miles) | 1468 |
| Seedings (acres) | 12,315 |
| Land Treatments (acres)* | 85,996 |
| Reservoirs and stock ponds | 29 |
| Spring Developments | 285 |
| Pipelines (miles) | 175 |
| Guzzlers | 3 |
| Wells | 25 |

*Land Treatments = burns, chemical, or mechanical treatments

## *Standards for Rangeland Health and Grazing Management Guidelines*

The rangeland reform process of 1996 modified the grazing regulations identified in 43 CFR part 4100. A new regulation was developed and is currently being implemented throughout the BLM. The regulation, 43 CFR 4180, addresses the fundamentals of rangeland health. In May 1997, the Montana State Director approved the Standards for Rangeland Health and Guidelines for Livestock Grazing that were developed in consultation with the Butte District Resource Advisory Council (now the Western Zone). These standards and guidelines are intended to provide a clear statement of agency policy and direction for those who use public lands for livestock grazing and for those who are

responsible for their management and accountable for their conditions.

The objectives of the rangeland health regulations are to "...promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions... and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands." The fundamentals of rangeland health combine the basic precepts of physical function and biological health with elements of law relating to water quality and plant and animal populations and communities. Although the focus of the standards is on domestic livestock grazing on BLM lands, on-the-ground decisions must consider the effects and impacts of all uses.

The standards are the basis for assessing and monitoring rangeland conditions and trend. The assessments evaluate the standards and are conducted by an interdisciplinary team with participation from permittees' and other interested parties. The five standards for rangeland health in the Butte District (Western Zone) are as follows:

Standard # 1: Uplands are in proper functioning condition.

Standard # 2: Riparian and wetland areas are in proper functioning condition.

Standard # 3: Water quality meets state standards.

Standard # 4: Air quality meets state standards.

Standard # 5: Provide habitat as necessary, to maintain a viable and diverse population of native plant and animal species, including special status species.

Based on 43 CFR 4180, if existing grazing management is a significant factor in the non-attainment of a standard, appropriate actions will be implemented that will result in significant progress toward attainment of the standard(s) as soon as practical but no later than the start of the next grazing season.

The Dillon Field Office began assessment of the standards and guidelines in 1998 and will continue until all allotments are assessed and management revisions deemed necessary have been initiated. The evaluation process has been completed on 67 allotments covering 208,431 acres through the end of the 2001 fiscal year. In the assessments completed, existing grazing management was identified as contributing to the non-attainment of some standards on a portion of the allotments. New management has been initiated on all of these allotments in the new term grazing permits. If a term grazing permit expires and an assessment cannot be completed due conflicting workloads, a standard stipulation is placed in the terms and conditions of the permit identifying that an assessment will be completed in the near future. This assessment may result in a modification of the permit if it is determined that livestock grazing is contributing to the non-attainment of a standard.

### *Unauthorized Use*

Prohibited acts identified in regulations found at 43 CFR 4140 result in unauthorized grazing use. Grazing permittees and lessees as well as the public can be cited for unauthorized grazing use, depending on the circumstances. The most common unauthorized use that occurs in the planning area is the grazing of livestock outside the area or at a different time than authorized. Settlement of unauthorized use is handled in accordance with regulations at 43 CFR 4150 and depends upon the willfulness of the action.

## 3.2.4 MINERALS

### Laws, Regulations, and Policies

The management of minerals on lands administered by BLM is split into three main categories: leasable, locatable, and saleable

minerals. The following major laws, mandates, and guidance direct the management of these resources.

General Mining Law

- Act of July 26, 1866
- General Mining Law of 1872
- Federal Land Policy and Management Act of 1976
- 82-4-390, Montana Code Annotated (Initiative 137) regarding cyanide ore-processing
- Montana Natural Streambed and Land Preservation Act

Leasable Minerals

- The Mineral Leasing Act of 1920, as amended
- The 1947 Acquired Lands Mineral Leasing Act
- Geothermal Steam Act of 1970
- Federal Onshore Oil and Gas Leasing Reform Act of 1987
- Conner v. Burford, 848 F. 2d 1441, 9th Cir., 1988
- 43 CFR Group 3100 (Oil and Gas Leasing)
- 43 CFR Group 3200 (Geothermal Resource Leasing)
- 43 CFR Group 3400 (Coal Management)
- 43 CFR Part 3500 (Leasing of Solid Minerals other than Coal and Oil Shale)

Locatable Minerals

- 43 CFR 3715 (Use and Occupancy Under the Mining Laws)
- 43 CFR 3802 (Exploration and Mining, Wilderness Review Program)
- 43 CFR 3809 (Surface Management)

Salable Minerals

- Mineral Materials Act of 1947
- 43 CFR 3600 (Mineral Materials Disposal)

# Affected Environment

A significant amount of mining has taken place over the years in the planning area. Most mining activities have tended to be boom and bust due to mineral prices, economic conditions, and availability of the ore. The following discussion covers leasable and locatable minerals and mineral materials (also known as Salable Minerals).

## *Leasable Minerals*

### Coal

The potential for development of coal is unlikely in the planning area due to the limited occurrence, inaccessibility of deposits, and low grade.

Small amounts of lignite and bituminous coal are known or suspected to exist in the Dillon Field Office. Late Cretaceous coal is exposed along the upper part of the Ruby River in the valley between the Snowcrest and Gravelly Ranges in Madison and Beaverhead Counties. Most of the coal beds are less than one foot thick, although some local deposits are up to two and one half feet thick.

Tertiary coals may exist in many of the intermontane basins located in the Field Office. However, outcrops are not reported in the Big Hole Valley, Jefferson Valley, Beaverhead Valley, Madison Valley, or Centennial Valley. If Tertiary Coals exist in these basins, they would most likely be low grade likely consisting of thin beds of lignite covering restricted areas (Hall and Gill, 1953).

The coal beds found in the Medicine Lodge Creek Valley are part of the best exposures of coal-bearing Tertiary lake deposits in southwestern Montana. Small-scale coal mining occurred in the area until the winter of 1949/1950 (Hall and Gill, 1953). More than 14 beds of high ash and high sulfur coal as much as 6.7 feet thick have been revealed by drilling several exploratory holes in Tertiary rocks exposed in the area. Previously described as lignites, the coals rank from subituminous A to high volatile B bituminous. The strata are relatively steeply dipping and localized by faults

(Dyni and Schell, 1982).

## Coalbed Methane

There is a very small chance of economic coalbed methane resources occurring in the Dillon Field Office because the coal is typically lignite. There are no existing sources of coalbed methane being produced from lignite in the United States. In addition, areas with higher rank coal have been metamorphosed and faulted into steeply dipping beds that limit the possibility of coalbed methane traps.

## Geothermal Resources

Geothermal energy is energy contained in the rock and fluid that fills the fractures and pores in the earth's crust and is released as hot water and steam. Due to a variety of geologic processes, shallow geothermal resources underlie substantial portions of many western states including lands administered by the Dillon Field Office. However, there is presently (2002) a low level of interest in developing Montana's federally owned geothermal resources.

These resources can be classified as low temperature (less than 194$^{o}$ F), moderate temperature (194$^{o}$ - 302$^{o}$ F), and high temperature (greater than 302$^{o}$ F). Low and moderate temperature resources are generally used for heating rather than power generation. There are at least 23 known thermal springs or warm drill holes in Madison and Beaverhead Counties. Measured temperatures range from 59.9$^{o}$ F to 160.7$^{o}$ F. Estimated reservoir temperatures range from 86$^{o}$ F to 267.8$^{o}$ F. Presently, there are seven inventoried facilities using geothermal heat in Beaverhead and Madison Counties, all of which produce from non-federal resources (Geo-Heat Center, 2002). There are no geothermal power plants anywhere in Montana including the Dillon Field Office, as there are no identified high temperature resources in the State. Statewide, the BLM has only received two inquiries since 1979 regarding development of federal geothermal resources in Montana.

## Oil and Gas

There are no producing oil and gas wells in the Dillon FO. A total of 13 dry holes have been drilled in the two counties since 1980. (If no economically producible oil or gas is discovered, a well is called a "dry hole.") The last of these was completed in 1996 in Beaverhead County. Minimal drilling is partially due to the fact that leasing in the planning area has been curtailed until this RMP and the Forest Service leasing document for the Beaverhead-Deerlodge National Forest could be completed. Up until the mid 1980s, most of the planning area was under lease. As a result of litigation, few new leases were issued and existing leases were allowed to expire. At the end of 2001 there were 12,611.68 acres under Federal lease in the planning area. Because leasing has been curtailed, there are at present (March 2002) 36 suspended, nominated lease parcels covering 34,023.37 acres in Madison and Beaverhead Counties.

The planning area is partially within the Rocky Mountain Overthrust Belt and partially within the Central Rocky Mountain Foreland Province. The Rocky Mountain Overthrust Belt, also known as the Sevier Thrust Belt, is characterized by low angle thrust faulting. East of this line, in the Central Rocky Mountain Foreland Province, thrust faults still occur, but they are at a much higher angle and involve basement rock (granite and Precambrian cores of mountains). Both areas are considered highly prospective for oil and gas. Most of the previous drilling activity in southwest Montana has been focused in the Foreland Province.

Geologic knowledge of the planning area is based on surface mapping, geophysical data, and the 44 dry oil and gas wells drilled in the region. While 44 wells may seem like many tests, 26 of those were drilled less than 5,000 feet deep. This is not considered an adequate depth to test the deep structures of Southwest Montana. Drilling 44 consecutive dry holes in frontier areas is not unusual. In the Wyoming Overthrust Belt, 134 wells were drilled before a

major discovery was found at Ryckman Creek field in 1976. The Ryckman field has since produced more than 150 billion cubic feet of gas and 50 million barrels of oil.

*Occurrence Potential*

The potential for occurrence of oil and gas in the planning area has been classified by BLM staff geologists based on standardized criteria. Because the occurrence potential is based solely on geology, Congressionally designated wilderness areas have been rated for their occurrence potential. Areas classified as having a high potential for the occurrence of oil and gas are reserved for proven oil and gas producing provinces. There are no areas of "high" oil and gas occurrence potential in the planning area because the nearest producing field is very far from southwest Montana. Moderate occurrence potential designates an area with at least 2,500 feet of apparently unmetamorphosed sediments overlying Archean rocks. This designation also requires that the area is located in a non-productive province and contains probable source and reservoir beds. Low occurrence potential areas were classified using two slightly different standards. Under the first, they are areas having sediments less than 2,500 feet thick or areas where there is insufficient evidence to determine the sediment thickness. Under the second standard they are areas with 1,000 to 3,000 feet of sediment covering Pre-Cambrian rocks. Areas with very low occurrence potential are primarily Precambrian outcrops or highly metamorphosed rocks that are not proven overthrusts with a section of sediments below the thrusts faults.

*Development Potential*

The potential for development of oil and gas in the planning area has been classified by BLM staff geologists based on standardized criteria. **Table 26** summarizes lands administered by BLM with very low to high development potential. Development potential across the planning area is depicted on **Map 6**. As with the occurrence potential rankings, there are no areas of "high" development potential within the planning area. High development potential areas occur in proven producing petroleum provinces and where established production has demonstrated the economic viability of numerous additional development wells, such as the Sweetgrass Arch or the Williston Basin in Montana. An area of high potential for development has proven production or significant hydrocarbon shows. Areas of moderate development potential have an adequate sedimentary section present that includes possible source and reservoir rocks for oil or gas. An area having a low potential for development has a thin sedimentary section present or there is insufficient subsurface data available to analyze the potential. It also lacks source or reservoir rocks or is metamorphosed. An area of very low development potential has no sedimentary section at the surface or insufficient data for a different classification. Low development potential areas also include areas of federal lands that are unavailable for leasing.

**Table 26. Oil and Gas Development Potential Rankings across the Planning Area**

| | Acres of Very Low | Acres of Low | Acres of Moderate | Acres of High |
|---|---|---|---|---|
| Total Acres | 2,620,736 | 2,594,140 | 633,706 | 0 |
| Acres Covered by RMP Decisions | 512,508 | 653,862 | 190,722 | 0 |

The BLM has developed a Reasonably Foreseeable Development Scenario based on analysis of the occurrence and development potential. The BLM estimates that six wildcat

wells could be drilled in the planning area within the next 10 to 15 years (A "wildcat well" is an exploratory well drilled in an area with no existing production.). Of these six wells, the BLM estimates that four would be dry holes. Dry holes would be plugged and abandoned with surface reclamation occurring shortly afterward. It is believed that two of the wells could likely have gas discoveries (however there–is also a smaller chance of oil production). Of the two discoveries it is projected that one producer would be developed on Federal minerals administered either by the BLM or by the Forest Service and the other would be on privately owned minerals. Each of those wells would probably prompt additional step-out wells (A "step-out well" is a well drilled adjacent to or near a proven well to establish the limits of the oil or gas reservoir.). The BLM estimates that a total of four step-out wells would be drilled, two for each discovery. The general areas where exploration might occur in the two counties are depicted on **Map 7**.

## Oil Shale

At present (late 2002) there is a very low interest nationally and locally in oil shale as an energy resource.

Oil shale resources are known to exist within the boundaries of the Dillon Field Office. In the Dillon-Dell area the formation of chief interest as a bearer of oil shale is the Permian Phosphoria Formation. In the general area, the Phosphoria crops out along the principal mountain fronts, is generally steeply dipping, and is extensively faulted.

Between the principal mountain ranges in the Field Office are broad valleys with rolling topography underlain by gently dipping oil shale bearing Tertiary strata. These formations are limited in occurrence. The rocks consist of sandy shale, sandstone, impure lignitic coal, brown oil shale, and an abundant shaly to conglomeratic volcanic material. The basal unit of these formations is a conglomerate containing limestone, shale, sandstone, granite, and quartz pebbles.

Oil shale from the Phosphoria averages about 10 gallons per ton upon distillation, a maximum of 24 gallons per ton have been produced. Tertiary sources have yielded less oil in most cases, although a high of 36 gallons per ton has been produced.

One serious attempt to commercialize oil shales in the Field Office was made by the Dillon Oil Company. In early 1919 a small retort plant was installed east of Smallhorn Canyon, 12 miles south of Dillon. This plant was used for tests during the summer of 1919 (Winchester, 1923).

## Phosphate

The major leasable solid mineral in the planning area is phosphate. Phosphates occur in the Permian Phosphoria Formation. Significant phosphate deposits exist in the Centennial Mountains on the Idaho – Montana state line. Much of this area is now under jurisdiction of the USDA Agricultural Research Service (ARS) though BLM administers the federal mineral estate. Open cut mining has occurred on both sides of the border, however none of the mines are active today and they have all been reclaimed.

Significant phosphate mining has also occurred in the past in the extreme northern part of the planning area near Maiden Rock. Surface and underground mining and associated operational facilities occurred on both sides of the Big Hole River, extending onto lands that are now administered by the Butte Field Office.

Phosphate deposits in this planning area are not now being mined because surface deposits in Florida and Idaho are much cheaper to remove. These more economic deposits are being rapidly depleted, and some time in the next 20 years, Montana may once again become an important source of phosphate. This mineral is an essential agricultural nutrient, and as soils continue to become depleted, these phosphate deposits will become critically important to our food supply.

## *Locatable Minerals*

The diverse geology of the planning area has resulted in a wide variety of mineral deposits that have been mined since the 1860's. Locatable minerals present in the resource area include, but are not limited to gold, silver, copper, lead, tungsten, talc, chlorite, and vermiculite. Maps compiled by the U.S. and Montana Bureau of Mines in 1995 show known occurrences of selected commodities and locations of mines, prospects, sites, and mineral potential areas. **Map 8** shows the distribution of mining activity across the planning area.

### Overview of Production

Gold was first discovered in the planning area at Bannack in 1862. In 1863 the placer gold deposits of Virginia City were discovered. This district became the largest producing mining district in the state of Montana, producing almost $1 billon worth of gold and associated metals over the years (1992 dollars). Most of this value was from placer gold. Today production from the Virginia City area is small and sporadic, but exploration in the area is ongoing and interest remains high. The second largest producing historic district within Madison and Beaverhead Counties, in terms of dollars produced, is the Hecla Mining District. Located west of Melrose on private and Forest Service lands, this hard rock underground district produced approximately $135 million (1992 dollars) worth of silver, lead, copper, zinc and gold. Numerous other historic mining districts exist in the planning area. **Appendix E** provides a list of significant mining districts and their respective production compiled by the U.S. Bureau of Mines in 1995 (Mineral Resource Development manuscript on file in the DFO). Most of these historic districts have potential for future mining activity if mineral prices increase.

In recent years, Beaverhead and Madison Counties have produced large quantities of talc and chlorite. The Barretts Minerals Inc. Treasure Mine (located on BLM and patented claims) and the Regal Mine (located on private estate) are producing significant quantities today. The Treasure Mine has been operating for 40 years and is estimated to contain another 28 years of reserves. Barretts Minerals Inc. is a major industry in the Dillon area employing approximately 100 people. The Yellowstone Mine (private estate) owned by Luzenac America and located south of Ennis is also a major producer of talc in this area. The Beaverhead Mine located just south of the Treasure Mine produced significant amounts of talc, but was closed in 1999 and reclaimed. The Willow Creek Mine (Forest Service) located southeast of Ruby Reservoir produced notable quantities of talc until it closed a number of years ago. The Antler Chlorite Mine located south of Silver Star produced significant quantities of chlorite until it too closed a couple of years ago. Chlorite from the Antler Chlorite mine was used on tiles that went on the space shuttle.

Only one metal producing mine in the planning area is currently active. This is a small placer gold operation located several miles from Bannack. It is approved under a Plan of Operation. Other sporadic or small-scale open pit and underground metal mining has occurred in recent years in Beaverhead and Madison Counties.

The planning area has also been the source of various other minerals production. A limited amount of vermiculite was produced from the Elk Gulch Mine south of the Sweetwater Road. The mine operated under a Notice (less than 5 acres of disturbance) from 1990 to 1998, at which point the operator submitted a Plan of Operation. Due to permitting problems, this project was never expanded over 5 acres and the site is currently inactive. Although there has been some interest in, and exploration for garnets, actual mining has been limited to private lands.

Talc production is the only substantive mineral production presently occurring in the planning area. The Treasure Mine and a small placer gold operation are the only two operations presently considered active on public land. Exploration activity also remains low, probably due to the

current low metal prices.

The planning area currently contains no gold cyanide heap leach or cyanide milling operations even though deposits exist that may be amenable to cyanide extractions. The passage of Montana Initiative 137 in 1999 bans the use of cyanide to process material that originated from open-pit mines through cyanide heap and vat leach technologies. Not being able to use cyanide limits the number of deposits that are (or could be) economic.

## BLM Management

Surface disturbing activities under the jurisdiction of 43 CFR 3809 (43 CFR 3802 if within a wilderness study area) regulations are reviewed on a case-by-case basis. Occupancy related to mining is regulated under 43 CFR 3715. The intent of these regulations is to prevent undue and unnecessary degradation of surface resources and to ensure reasonable reclamation of disturbed sites on federal lands.

According to 43 CFR 3809, casual use or handwork using a pick or shovel does not require notification to BLM. Submission of a Notice is required 15 days prior to any surface-disturbing exploration activities using mechanized equipment or explosives when the cumulative disturbance is less than five acres. Production activities or exploration activities disturbing more than five acres require a Plan of Operation, Reclamation Plan, and environmental analysis. Notices and Plans of Operation both require a reclamation bond. Notices and casual use are not federal actions and thus do not require environmental analysis or approval by the authorized officer. However, notices are reviewed and measures applied to prevent unnecessary and undue degradation.

The BLM is required to conduct inspections at least yearly on Notices and Plans of Operation to ensure compliance and to check for unauthorized use. BLM works closely with the MT DEQ on processing Plans of Operations and Notices and inspecting mining operations. Per Memorandum of Understanding, MT DEQ is the lead agency on jointly approved Plans of Operation. The State of Montana does not require that a Plan of Operation be submitted for production operations with less than five acres of disturbance under the Montana Small Miner Exemption.

There are 40 Notices and 12 Plans of Operation currently on file at the DFO. As mentioned earlier, only the Treasure Mine and a small placer gold operation are presently considered active. Total unreclaimed disturbance from the 40 Notices is estimated at 23 acres. Much of this disturbance has a reclamation bond associated with it. Disturbed acreage associated with the 12 Plans of Operation is estimated at 300 acres, also bonded for reclamation.

Under current management, less than an estimated 30,000 acres of public land in the planning area is withdrawn from mineral entry. See the *Withdrawal* section for more specific information.

There are approximately 1,650 active mining claims located on BLM, Forest Service and private surface estate in Beaverhead and Madison Counties. Recordation and processing of mining claims are handled at the BLM Montana State Office.

## Unauthorized Use

Regulations found at 43 CFR 3715 state “The purpose of this subpart is to manage the use and occupancy of the public land for the development of locatable mineral deposits by limiting such use or occupancy to that which is reasonably incident. The BLM will prevent abuse of the public lands while recognizing valid rights and uses under the Mining law of 1872 and related laws…”.

These regulations were enacted in 1996 to prevent occupancy of public land under the guise of mining when no justifiable reason or significant amount of mining is occurring. The occupancy must be “reasonably incident to mining” (not undue and unnecessary) and the occupancy must be needed to sustain regular work, to protect property, or other justifiable

reason. It must also lead to the extraction and beneficiation of minerals, involve observable activity and use appropriate operable equipment. Generally, if adequate housing within a reasonable distance is available the occupancy is not justified (unless property must be protected).

BLM has four types of enforcement actions it takes under the regulations found at 43 CFR 3715. These include 1) immediate suspension, 2) cessation order, 3) notice of noncompliance, or 4) other (if the occupancy is not incidental to mining, an application for use under another regulation may be required, and trespass under a different regulation may be pursued).

### *Mineral Minerals*

Congress set aside minerals that cannot be reserved by a mining claim, but can be purchased from the government on a per ton or per cubic yard basis. These are known as mineral materials or common variety minerals, and include such things as sand, building stone, gravel, pumice, cinders, and clay.

BLM's policy is to make mineral material available to the public and local governmental agencies whenever possible and whenever it is environmentally acceptable. Mineral material is sold to the public at fair market value, but is given free to states, counties, or other government entities for public projects. A limited amount may also be provided free to non-profit groups. Materials obtained free of charge cannot be bartered or sold. Occasionally an exclusive sale or an exclusive free use permit will be issued. This gives a person, corporation, or entity the exclusive right to remove material from a particular location. Before they are opened, all sites must have an approved Plan of Operation, a Reclamation Plan, and environmental analysis. In some cases a reclamation bond is required. Mineral Material sales and management is conducted under 43 CFR 3600.

The DFO currently maintains eight mineral material sites listed in **Table 27**. Combined sales from all these sites tends to be relatively low; however, these sites provide a valuable public service by providing mineral material within a close proximity of where they are needed.

**Table 27. BLM Mineral Material Sites in the Planning Area**

| Material Location | Available Material | Acres |
|---|---|---|
| Silver Star | Rip Rap, Borrow | 40 |
| Small Horn | Rip Rap | 40 |
| Rochester | Rip Rap | 34 |
| Laurin | Gravel | 40 |
| Camp Creek | Decorative Stone | 208 |
| Badger Pass | Gravel | 40 |
| Sheep Creek | Rip Rap | 10 |
| Lima | Sand and Gravel | 40 |
| Note: "Acres" represents acres within the project boundary or collection area and does not represent acres disturbed. Actual acres disturbed is usually much less. | | |

# 3.2.5 RECREATION

## Laws, Regulations, and Policies

Recreation management on public lands administered by the BLM is authorized under and directed by the following laws, mandates and guidance:

- Federal Land Policy and Management

Act (43 U.S.C. 1701-1782).
- Land and Water Conservation Act, as amended (16 U.S.C. 4601-4).
- National Trails System Act (16 U.S.C. 1241-1249).
- National Wild and Scenic Rivers Act (16 U.S.C. 1271-1287).
- National Parks and Recreation Act of 1978 (16 U.S.C. 1242-1243).
- Alaska National Interest Lands Conservation Act [ANILCA] of 1980 (16 U.S.C. 3101 et seq.)
- Federal Cave Resource Protection Act of 1988 (P.L. 100-691).
- Executive Order 11644, Use of Off-Road Vehicles on Public Lands (37 FR 2877; Feb. 8, 1972)
- Executive Order 11989, Off-Road Vehicles on Public Lands (42 FR 26959; May 25, 1977)
- Executive Order 13195, Trails for America in the 21st Century
- Antiquities Act (16 U.S.C. 433).
- Archaeological Resources Protection Act [ARPA] (16 U.S.C. 470aa).
- Taylor Grazing Act (43 U.S.C. 315a)
- Endangered Species Act (16 U.S.C. 1531 *et seq*.)
- Act of September 15, 1960, as amended (16 U.S.C. 670 *et seq*.)
- Wild and Scenic River Act (16 U.S.C. 1281c)
- Recreation Fee Demonstration Project (PL 104-134, HR 3019, Section 315)
- Director's Priorities for Recreation and Visitor Services—BLM Workplan for 2003-2006
- Architectural Barriers Act (ABA) of 1968
- Rehabilitation Act of 1973, Section 504
- Uniform Federal Accessibility Standards (UFAS)
- American with Disabilities Act Accessibility Guidelines (ADAAG)

Motorized vehicle use on public lands is managed according to the Southwest Montana Interagency Visitor/Travel Map last published in 1996. Management prescribed on this travel map is amended by the BLM/USFS *Off-Highway Vehicle EIS and Proposed Plan Amendment for Montana, North Dakota and Portions of South Dakota* (USDI-BLM, et al. 2001), which eliminated cross-country travel of motorized vehicles on BLM and USFS lands within this planning area. [BLM has still not signed the ROD] Travel management is also modified by the *Centennial Mountains Travel Management Plan* (USDI-BLM 2001a), which restricted motorized vehicle use to designated routes within the Centennial Mountains area, prohibited use of snowmobiles, restricted mountain bike use to designated roads, and identified certain trails to be maintained for hiking and equestrian use.

## Affected Environment

Lands within the planning area offer a tremendously diverse array of recreational activities that are maintained at relatively high use levels throughout most of the year. Recreation in the eastern portion of the planning area is dominated by river recreation uses along the Madison River including; fishing, floating, whitewater rafting and kayaking. All of the Field Office's recreation fee sites, and the majority of the developed recreation facilities are along the Madison River. The proximity of this area to Bozeman and Gallatin County increases the intensity of recreational demand.

Although BLM manages relatively isolated tracts of public lands along the rivers, fishing and floating uses are major recreational activities, particularly along the Big Hole and Beaverhead Rivers in the western portion of the planning area. Other streams in Beaverhead County also receive significant recreational fishing use.

Other recreation activities in the planning area include: horseback riding, hiking, hunting, lake fishing (Axolotl Lakes), camping, snowmobiling, mountain biking, rock climbing, wildlife viewing, rock collecting, motorized vehicle use, etc. The most intensive recreational use area-wide occurs during the big game hunting season. Nearly all of the BLM lands in

the planning area contain populations of big game, at least seasonally, that attracts hunters from throughout the state, and the entire country.

The BLM Dillon Field Office Recreation program has responsibility for:

- 20 developed recreation sites with widely varied levels of development ranging from minor improvements for parking to multi-site hosted campground facilities
- a 55-mile road segment identified as a National Back Country Byway
- the 6,000-acre Bear Trap Canyon Wilderness Area
- 10 Wilderness Study Areas totaling approximately 123,000 acres
- Dispersed recreation throughout the approximate 900,000 acres in the planning area

Trail management responsibilities include approximately 21 miles of the Continental Divide National Scenic Trail with another 8 miles of "feeder trails" accessing it in the Centennial Mountains; nine miles of the Bear Trap Canyon National Recreation Trail within the Bear Trap Canyon Wilderness; and portions of the Lewis & Clark, and Nez Perce, National Historic Trails. There are numerous other unmarked or unmaintained trails on public lands that receive varying levels of use.

Reported recreation-related visitor use over the last three years in the planning area has averaged over 225,000 visits annually (RMIS report #23b, FY '99 – 2001). Adjustments made in 2002 to account for underreported dispersed use across the planning area more closely estimate visitor use at 335,000 visits. The highest participation according to activities is: fishing, camping, rowing/floating/rafting, hiking, big game hunting.

## *Special Recreation Management Areas*

The Dillon Field Office has identified eight (8) Special Recreation Management Areas (SRMAs) in the planning area to direct recreation program priorities toward areas with high resource values, elevated public concern, or significant amounts of recreational activity. The SRMAs and associated acreage as reported in RMIS are: Axolotl Lakes (7,804 acres); Bear Trap/Red Mountain (7,500 acres); Big Sheep Creek (1,000 acres); Centennial Mountains (21,774 acres); East Fork of the Blacktail (6,730 acres); Lower Big Hole River (12,980 acres); Ruby Reservoir (120 acres); and the Upper Madison River (4,200 acres). The remainder of the planning area is included in the Dillon Extensive Recreation Management Area. Most recreation activity occurs within the SRMAs throughout the year, except during the big game hunting season when use is widely dispersed throughout the planning area.

### Special Recreation Permits

The Dillon Field Office currently administers approximately 30 ongoing commercial use recreation permits of which approximately 18 are for outfitted big game hunting. Database records indicate 982 visitor use days associated with big game hunting reported for 2001. Many of these permitted outfitters also provide visitors an opportunity for horseback riding and other backcountry recreation activities outside the hunting season. There are approximately eight applications made annually for permits to hold special events or organized group events on public lands. These have been processed on a case-by-case basis. During the preparation of this land use plan, a moratorium has been enacted for this office, and no new applications for permits are being accepted which require NEPA analysis. Permits not requiring preparation of an Environmental Assessment can continue to be issued, including renewals and transfers of existing permits, repeats of events or activities previously analyzed and permitted, or minor activities with negligible opportunities for resource or user conflicts.

## *Off-Highway Vehicles and Travel Management*

BLM regulations (43 CFR 8342.1) require that all BLM public lands be designated as "open,"

"limited," or "closed" to off-highway vehicles (OHVs). According to information from the Recreation Management Information System, the Dillon Field Office manages 712,460 acres as "open" to off-highway vehicle use, 196,874 acres as "limited," and 56,774 acres as "closed." These acreages were approximated from the *Southwest Montana Interagency Visitor/Travel Map* (1996), which is the basis for the current travel management for public lands in the Dillon Field Office. These acreages do not reflect several land adjustments that have occurred but provide a relative comparison of acres in the planning area open, limited and closed.

The *Southwest Montana Interagency Visitor/Travel Map* became the means for identifying travel management decisions for all of the land managing agencies in southwest Montana since the early 1980's. Cooperators for the current travel management include:

- Bureau of Land Management (BLM)
- Beaverhead-Deerlodge National Forest
- Montana Fish, Wildlife & Parks (FWP)
- Red Rock Lakes National Wildlife Refuge
- USDA Agricultural Research Service
- Clark Canyon Recreation Area (BOR)
- Big Hole National Battlefield (NPS)
- Montana Department of Natural Resources and Conservation
- Beaverhead County Commissioners

The map is intended to be updated every three years, but the 1996 version remains the most current. The map has been amended by the decision signed by the Forest Service implementing the *Off-Highway Vehicle Record of Decision and Plan Amendment for Montana, North Dakota and Portions of South Dakota* (USDI-BLM, et al. 2001). BLM has not signed a decision on this plan amendment as of January 2003. When signed, this decision "establishes a new standard that restricts yearlong, wheeled motorized cross-country travel, where it is not already restricted." Although there are several exceptions to this restriction, it essentially eliminates all areas previously designated as "open" (to cross-country vehicle travel) according to the definitions provided in BLM's regulations at 43 CFR 8342.1.

Currently, OHV use in the Dillon Field Office is primarily associated with resource management activities and hunting. Although nearly 74% of the public lands in the planning area were identified as "open" to cross-country travel on the 1996 travel map, the majority of cross-country travel has not been recreational OHV riding, but related rather to hunting and other multiple-use activities (i.e. – grazing administration, firewood gathering, etc.).

In preparation for this land use plan, the BLM Dillon Field Office conducted an inventory of roads and trails on BLM lands within the Field Office, including routes, however faint, that crossed BLM lands and were accessible to the public. The intent of the inventory was to map and photo-document the condition of routes across public lands, focusing on those routes that were unlikely to appear in any other mapped road coverages (i.e. – on existing USGS maps). It is estimated that at least 90% of existing routes were mapped, and their conditions documented, through this inventory effort. If the BLM were to manage according to the decision provided in the OHV/EIS, this map of inventoried routes, combined with other routes appearing on USGS maps, would be considered the baseline for "existing routes" within the Dillon Field Office.

Snowmobile use is naturally limited on BLM lands within the planning area because the majority of the lands are in the lower elevations where there is inadequate snow cover. In the higher elevation areas of BLM lands, snowmobile use is mostly unrestricted. Those areas closed year-round, or seasonally restricted, to snowmobile use are restricted primarily for the benefit of wildlife. Approximately 138,974 acres have some type of restrictions to snowmobile use.

BLM has maintained an agreement with the Vigilante Snowmobile Club, based in Virginia City, for maintenance of a groomed snowmobile route through the north end of the Gravelly Mountains in the area of Alder and Bachelor

Gulch. An annual snowmobile "poker ride" has been permitted in that area for approximately the last ten years through a joint USFS and BLM Special Recreation Permit.

Snowmobile use was once relatively common through the Odell Creek Canyon in the Centennial Mountains. Snowmobile use never occurred legally through this area since neither the USFWS, nor the private property owners at the mouth of the canyon, allowed snowmobile access across their lands. This part of the Centennial Mountains was officially closed to snowmobile use across BLM lands as part of the Centennial Mountains Travel Management Plan (USDI-BLM 2001a). Areas of relatively regular snowmobile use include the Centennial Valley, Axolotl Lakes area (north end of Gravelly Mountains), Highland Range, Sage Creek and the north end of the Blacktail Mountains. Use occurs intermittently in other high elevation areas depending on snow cover.

# 3.2.6 RENEWABLE ENERGY

## Laws, Regulations, and Policies

- Federal Land Policy and Management Act of 1976, as amended
- National Energy Policy

## Affected Environment

Consideration of renewable energy sources available on the public lands has come to the forefront of land management planning as demand for clean and viable energy to power the nation has increased. No special management provisions were considered in the Dillon MFP specifically in regard to renewable energy resources and applications for renewable energy are analyzed on a case-by-case basis, though to date there has not been a strong demand on public lands in the planning area.

In cooperation with the National Renewable Energy Laboratory (NREL), BLM assessed renewable energy resources on public lands in the western United States (USDI-BLM, et al. 2002). The assessment reviewed the potential for concentrated solar power, photovoltaics, wind, biomass and geothermal on BLM, BIA and Forest Service lands in the west. Hydropower was not addressed in the BLM/NREL report. In the Dillon planning area, wind and biomass resources had the highest ratings of the five categories addressed in the BLM/NREL study. The details of each category are described below.

### *Concentrating Solar Power (CSP)*

This technology uses sunlight concentrated on a single point to generate power. The BLM/NREL study indicates that the potential for this type of renewable energy lies primarily in states to the south and southwest of Montana. No BLM lands within the planning area were identified as having potential for this type of energy source. In keeping with this assessment, the DFO has not had any expressions of interest in developing CSP facilities on public lands.

### *Photovoltaics (PV)*

Photovoltaics technology makes use of semiconductors in PV panels (modules) to convert sunlight directly into electricity. The BLM/NREL study did not identify the DFO as one of the top 25 BLM planning areas for PV potential. However, the study did identify a total of approximately 287,918 acres of public lands within the planning area as having PV potential after screening criteria such as the amount and intensity of sunlight received per day, the proximity to power transmission lines, and environmental compatibility were applied. To date, though, the DFO has not authorized any PV facilities strictly for commercial power production, nor has any interest been expressed by industry in developing such facilities on BLM lands.

### *Wind Resources*

The BLM/NREL study identified the Dillon planning area as one of the top 25 BLM planning units having the highest potential for

wind energy development. The study takes into consideration certain screening factors such as wind velocity, proximity to roads and electric transmission facilities, the degree to which state and local policies support wind energy development, and environmental compatibility criteria in the rating of these planning areas. **Table 28** displays the results of this study as it pertains to BLM lands within the planning area. It should be noted that these acreages are approximate and reflect the results of the screening criteria referenced above. **Map 9** depicts the distribution of wind areas across the planning area rated between excellent and superb.

**Table 28. Classification of Wind Power Potential in the Planning Area**

| Wind Power Class | BLM Acres |
|---|---|
| Class 3–Fair | 85,298 |
| Class 4–Good | 34,781 |
| Class 5–Excellent | 12,429 |
| Class 6–Outstanding | 7,784 |
| Class 7–Superb | 1,719 |

Since the completion of the Dillon MFP in 1979, there have been no wind energy generation facilities authorized on BLM lands within the planning area. Although there have been a few inquiries about the possibility of erecting wind monitoring sites on BLM lands, only one such facility was actually applied for and subsequently authorized by the DFO. In 1996, a local utility company was issued a short-term right-of-way for a wind monitoring tower on public lands located about 25 miles west of Dillon. After completion of the monitoring, the company showed no further interest in the development of this or other sites in the planning area, and the monitoring facility was removed. Consultation with various local utility companies has revealed no future plans for wind energy development on public lands in the planning area. Despite this current low level of interest in wind energy, it is possible that with improvements in technology and a more favorable economic climate, interest in the development of wind energy facilities on public lands will increase.

## *Biomass*

The BLM/NREL study identified the Dillon planning area as one of the top 25 BLM planning units having high potential for biomass resources. However, to date, utilization of small diameter forest material has been sporadic at best to non-existent. This is due to long haul distances to pulp facilities and low return pulp markets. Some of this material is used through personal use firewood permits. This is directly related to distance from larger population centers such as Dillon and the length of time that access roads remain open prior to being closed. Utilization of this material for biomass related energy production has not been a factor. No such facility exists in this region.

The potential for such material from the existing forested land base located outside of the WSA's and designated wilderness is 80% of the approximately 83,000 acres (includes area of aspen stands) or about 64,000 acres. If the average acre has 2,000 Board Feet or 4 cords per acre of small size material, the planning area contains an estimated 328,000 cunits (100 cubic feet) of biomass material.

Use of small diameter wood products or residue is currently encouraged when possible.

## *Geothermal*

Geothermal resources are addressed under the Minerals–Leasable Minerals (Energy) section throughout the RMP.

# 3.2.7 TRANSPORTATION AND FACILITIES

## Laws, Regulations, and Policies

BLM authority for transportation management is primarily derived from the following sources:

- Federal Land Policy and Management Act of 1976 (43 U.S.C. 1715, 1737, 1762).
- National Environmental Policy Act of 1969, as amended (42 V.S.C. 4321, et seq).
- The Federal-Aid Highway Act of 1962, as amended (23 U.S.C. 214).
- The Federal-Aid Highway Act of 1968, as amended (23 U.S.C. 116).
- The Federal-Aid Highway Act of 1973, as amended (23 U.S.C. 217).
- Timber Access Road Act of 1955 (69 Stat. 374).
- Highway Safety Act of 1966, as amended (23 U.S.C. 401, 402, 403).
- Surface Transportation Assistance Act of 1982 (P.L. 97-424, Section 126(d)).
- National Trails System Act, as amended (1968) (16 U.S.C. 1241 et seq).

## Affected Environment

This section describes transportation facilities and their maintenance. Travel management of roads as open, closed or limited is discussed under the *Recreation* section.

### *Roads*

The Dillon Field Office contains an estimated 668 miles of transportation system roads as documented in the Facilities Inventory Maintenance Management System (FIMMS) database and many more miles of non-system roads. The DFO has never completed formal transportation planning to determine which roads will be included in a formal transportation system, so the following criteria for including roads in the system have been informally applied:

- Roads which are regularly maintained (e.g,, Campground roads, and other recreational area access roads.)
- Roads for which BLM has obtained easements. Easement acquisition indicates the route is important enough to warrant inclusion in the Transportation System.
- Roads which have structural improvements, such as culverts and cattleguards. These roads should be periodically inspected to insure the improvements are functioning properly, and drainage structures are not plugged.
- Other roads in which BLM has made significant investments. These roads should be inspected periodically to protect the investment.

Transportation system roads provide physical access to public, State, private, and other federal lands throughout the Field Office. Demands for transportation in the planning area are directly related to the resources found on public lands. A transportation system is needed to maintain access for commercial activities (e.g., livestock grazing, timber harvest, minerals development, outfitting and guiding), noncommercial activities and casual use (e.g., OHV use, hunting, fishing, rafting, camping, bird watching, recreational driving, firewood gathering), and for administrative access to manage resources.

BLM transportation system roads provide access to public lands administered by the BLM. Almost all of the roads are single lane, and almost all are natural material. A few high-usage roads are double lane, and a few are aggregate surfaced. On the average, 50 miles of BLM roads are maintained annually by BLM crews.

According to the FIMMS database, the Beaverhead/Deerlodge National Forest is

responsible for maintaining 48 miles of roads across BLM administered lands in the planning area, and the Gallatin National Forest maintains eight (8) miles. These roads cross BLM lands and provide access to Forest Service administered lands. They are generally single lane roads, with native soil or gravel surfacing. Most of the roads are maintained on a regular basis. Most of the roads are seasonally closed administratively by the Forest Service, or by snow.

Transportation system roads are classified by maintenance levels as specified in BLM Manual Handbook H-9113-2. While the levels identify schedules for maintenance, funding often does not allow BLM to meet the maintenance provisions of the assigned level. The five levels are described in **Table 29**.

The Dillon Field Office has no Level 1 roads. Roads which are no longer needed are removed from the transportation system. Roads which have been closed but which still contain culverts are assigned to Level 2.

Approximately 601 miles of road in the transportation system are Level 2 roads. Examples are the Basin Creek Road #6803, Coyote Flats Road #1864, and Riverside Road #2567 roads. These roads are more infrequently used than higher level roads, and include such roads as timber sale spur roads, or roads with a single destination ('dead end') as opposed to roads which loop or connect to other BLM, state, Forest Service, or other roads.

An additional 41 miles of roads are assigned to Level 3. Examples are the Barton Gulch Road #2524, Everson Creek Road #1882, and Muddy Creek Rod #1829. These roads access relatively large blocks of public land, and are important for recreational and commercial access.

Twenty five miles of roads are Level 4. Examples are the Red Mountain Campground Road #2539, West Madison Recreation Sites Road #2510, and Ruby Creek Campground Road #2512. According to FIMMS database notes, these are the most-traveled roads in the planning area, and require periodic maintenance to remain in good traveling condition for recreational and other visitors.

Dillon Field Office has no roads assigned to Level 5.

## *Trails*

The Dillon Field Office has 30 trails crossing over 106 miles identified in the transportation system based on the FIMMS database. All are identified as recreational access trails. Almost ¾ of the trail miles are located in three areas that receive high recreational use, including the Centennial Mountains, the East Fork of Blacktail, and the Lower Madison River area. Like transportation system roads, trails are assigned to five (5) levels which identify schedules for maintenance. Again, funding often does not allow BLM to meet the maintenance provisions of the assigned level. The five trail levels are described in **Table 30**.

The Dillon Field Office has no Level 1 trails in the transportation system.

Almost 46 miles are classified as Level 2 trails. Examples include the Hidden Pasture Trail #1810T and Garden Creek Trail #2510T. These trails are not on a regular maintenance schedule, and are maintained mostly by users according to notes in the FIMMS database.

Over 60 miles of trail are assigned to Level 3. Examples include the East Fork Blacktail Trail #1801T and the Nemesis Mountain Trail #1815T. These trails receive more frequent visitors, and are relatively major access points to roadless blocks of public land. Currently, these trails are not on a regular maintenance schedule, but are maintained mostly by users according to notes in the FIMMS database. The Continental Divide Trail #1800T and the Bear Trap Trail #2501T are other examples of trails in also in Level 3, but are maintained at a very low level to maintain wilderness character.

**Table 29. BLM Road Maintenance Levels**

| Maintenance Level | Assignment Criteria | Minimum Maintenance Standard |
|---|---|---|
| Level 1 | This level is assigned to roads where minimum maintenance is required to protect adjacent lands and resource values. These roads are no longer needed and are closed to traffic. The objective is to remove these roads from the transportation system. | Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless roadbed drainage is being adversely affected, causing erosion. Closure and traffic restrictive devices are maintained. |
| Level 2 | This level is assigned to roads where the management objectives require the road to be opened for limited administrative traffic. Typically, these roads are passable by high clearance vehicles. | Drainage structures are to be inspected within a 3-year period and maintained as needed. Grading is conducted as necessary to correct drainage problems. Brushing is conducted as needed to allow administrative access. Slides may be left in place provided they do not adversely affect drainage. |
| Level 3 | This level is assigned to roads where management objectives require the road to be open seasonally or year-round for commercial, recreation, or high volume administrative access. Typically, these roads are natural or aggregate surfaced, but may include low use bituminous surfaced roads. These roads have defined cross section with drainage structures (e.g., rolling dips, culverts, or ditches). These roads may be negotiated by passenger cars traveling at prudent speeds. User comfort and convenience are not considered a high priority. | Drainage structures are to be inspected at least annually and maintained as needed. Grading is conducted to provide a reasonable level of riding comfort at prudent speeds for the road conditions. Brushing is conducted as needed to improve sight distance. Slides adversely affecting drainage would receive high priority for removal, otherwise they will be removed on a scheduled basis. |
| Level 4 | This level is assigned to roads where management objectives require the road to be open all year (except may be closed or have limited access due to snow conditions) and to connect major administrative features (recreation sites, local road systems, administrative sites, etc.) to County, State, or Federal roads. Typically, these roads are single or double lane, aggregate, or bituminous surface, with a higher volume of commercial and recreational traffic than administrative traffic. | The entire roadway is maintained at least annually, although a preventative maintenance program may be established. Problems are repaired as discovered. |
| Level 5 | This level is assigned to roads where management objectives require the road to be open all year and are the highest traffic volume roads of the transportation system. | The entire roadway is maintained at least annually and a preventative maintenance program is established. Problems are repaired as discovered. These roads may be closed or have limited access due to snow conditions. |

**Table 30. BLM Trail Maintenance Levels**

| Maintenance Level | Assignment Criteria | Minimum Maintenance Standard |
|---|---|---|
| Level 1 | These trails are closed to motorized and non-motorized use. This level is the minimum maintenance required to protect adjacent lands and resource values. The objectives may be to remove these trails from the trail system. | Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Brushing and removal of hazards is not performed unless trail drainage is being adversely affected, causing erosion. Closure devices are maintained. |
| Level 2 | Low use trail with little or no contact between parties. Little or no visitor use management. Visitors may encounter obstructions like brush and deadfall. | Trail would require condition surveys once every year. Repairs will be done at the beginning of the season to prevent environmental damage and maintain access. Emphasis is given to maintaining drainage and mitigating hazards. The trail may be signed "Not Regularly Maintained". Major repair may not be done for several seasons. |
| Level 3 | Moderate use trail with visitor use on a seasonal/and or peak use period with frequent contact between parties. Trail management is conducted with occasional visitor use patrols. Visitors are not likely to encounter obstructions. | The trail shall require a minimum of one condition survey 1 to 2 times per season. Major repairs shall be completed annually. Maintenance shall be scheduled two to three times per season, if required, to repair the trail for environmental damage and to maintain access. Trail is kept in good condition. |
| Level 4 | High use trail used during specific times of the year with high frequencies of contact between parties. Regularly scheduled visitor use patrol and management. | Scheduled maintenance shall occur frequently during the use season (three or four times per season). Trail condition and accessibility for persons with disabilities is a major concern. Significant repairs shall be completed as within 10 workdays. |
| Level 5 | A special high use trail with routine visitor use patrols and management. | Has a scheduled maintenance program. Trail condition and accessibility for persons with disabilities is a major concern. Significant repairs shall be completed within 2-3 workdays. |

The Dillon Field Office has no trails in Level 4, and one (1) very short trail (about ¼ mile) in maintenance Level 5, the Trail Creek Handicap Fishing Access Trail #2508T. This trail has had significant investment to provide accessibility for persons with physical disabilities, and maintaining safe access is a major concern. It is regularly inspected and maintained.

### *Airstrips*

One unauthorized airstrip is located on BLM administered lands within the Field Office, on Erickson Creek in the upper Medicine Lodge drainage, T. 13 S., R 12 W., sec. 14, NW¼NW¼. It consists of 2 intersecting runways of about 1200 feet each. A hanger at the south end has fallen into disrepair. The

runways are natural unimproved surfaces, and are suitable only for light aircraft.

### *Boat Ramps*

Boat ramps are located on BLM administered land in the planning area at several locations along the Big Hole River, the Madison River, and Ennis Lake.

One (1) undeveloped boat ramp is available on the Big Hole River:

- Maiden Rock Recreation Site: a single width ramp of native material surface, suitable for white water boats, small boats and inflatable rafts.

Developed boat ramps are located at four (4) recreation sites on the Madison River:

- Palisades Day Use: a single width ramp of precast concrete planks, suitable for white water boats, small boats and inflatable rafts.
- West Madison Boat Ramp: a single width ramp of precast concrete planks, suitable for white water boats, small boats and inflatable rafts.
- Power House Boat Ramp: steel I-beam rails, suitable for inflatable rafts only
- Warm Springs Day Use: a double width ramp of precast concrete planks, suitable for white water boats, small boats and inflatable rafts.

Ramps are available at 2 sites on Ennis Lake:

- Kobayashi Beach Day Use: a single width ramp of cast in place concrete, suitable for small boats, rafts, and jet skis.
- Klute's Landing Recreation Site: a single width ramp of precast concrete planks, suitable for small boats, rafts, or jet skis.

In addition to these sites, numerous small, undeveloped boat, canoe, and raft launch sites occur on public land along the major rivers.

### *Communication Sites*

The Dillon Field Office has two (2) communication sites operated and managed by BLM (see the *Lands and Realty* section for additional information on communication sites managed by other authorized users). Both facilities are located in Madison County and are assigned to Maintenance Level 2. Level 2 sites are used infrequently by Bureau personnel and are maintained to assure health, fire and life safety standards are met, with condition surveys completed a minimum of every three years.

The Baldy Mountain Repeater Site (also known as Baldy Ridge) houses a repeater for the DFO radio communications system. One (1) other non-Federal user is located in the log cabin building on wood skids. It is powered by a solar panel, and includes two, 25 foot tall metal frame antenna towers.

The Bear Trap Radio Site houses a repeater for the DFO radio communications system in a 48" diameter cement culvert, 48" long, set vertically in the ground, with a steel cover. It is powered by a solar panel.

## 3.2.8 UTILITY AND COMMUNICATION CORRIDORS

### Laws, Regulations, and Policies

- Federal Land Policy and Management Act of 1976, as amended
- Mineral Leasing Act of 1920, as amended
- Federal-Aid Highway Act of 1958, as amended
- 43 CFR Group 2800
- IM WO-2002-196 (Right-of-Way Management-Land Use Planning)

- IM MT-2002-071

## Affected Environment

### *Status of Corridors in the Planning Area*

The planning area is traversed by a number of rights-of-way that are authorized for utility and communication uses. In accordance with direction provided in the Dillon MFP, attempts are made to group compatible right-of-way facilities where feasible. In particular, new communication site applicants are encouraged to locate in one of the ten communication site locations spread throughout the planning area. However, the DFO currently has no formally designated right-of-way corridors or use areas, nor have exclusion or avoidance areas been identified.

The 1992 Western Utility Corridor Study (Clayton and Associates 1992) produced by the Western Utility Group identified both proposed and existing corridors throughout the western United States. The study identified no proposed corridors within the planning area. However, the study did identify a number of existing corridors. These existing corridors correspond primarily with several of the major electric transmission lines found throughout the planning area and are depicted on **Map 10**.

### *Future Needs*

There are no known plans for energy generation facilities in the planning area that would require major corridors outside of existing general right-of-way locations. It is probable that existing power transmission lines will be upgraded and that additional transmission lines may be proposed to parallel other current linear rights-of-way. Future wireless communication sites will focus on interstate and highway corridors.

Consultation with local utility representatives indicates that designation of corridors as delineated in the 1992 study with some additions and modifications would meet anticipated future needs.